

Amendments to the Specification

At specification page 1, after the paragraph beginning with "[t]his is a nationalization," insert the following headings:

BACKGROUND OF THE INVENTION

1. Field of Invention

At specification page 1, after the paragraph beginning with "[t]he invention concerns a process," insert the following heading:

2. Description of the Prior Art

At specification page 2, after the paragraph beginning with "[o]n the other hand," insert the following heading:

SUMMARY OF THE INVENTION

At specification page 2, replace the paragraph beginning with "[t]his task is resolved" with the following replacement paragraph:

This task is resolved in accordance with the invention ~~by the characteristics of patent claim 1~~ as described herein, in which a portion of the ink stream that is supplied to the squeegee device is diverted to the ink supply tank, and/or a portion of the ink stream that is returned from the squeegee device is diverted to the ink supply line.

At specification page 2, replace the paragraph beginning with "[o]n the other hand," with the following replacement paragraph:

On the other hand, it must be taken under consideration in the case of the known device that during the circulation of the ink under printing operations, a larger volume must be fed back into the ink tank than is being pumped into it, since the ink in the ink chamber becomes enriched with air. As a consequence of this, the evacuating (i.e., return) pump must pump a larger volume than the delivery (i.e., feed) pump. This volumetric pumping ratio must be permanently monitored and readjusted manually when required.

At specification page 3, replace the paragraph beginning with "[g]iven the case," with the following replacement paragraph:

Given the case, that the vacuum (i.e., return) pump has a greater pumping capacity than the priming (i.e., feed) pump, in addition to the first bypass or in place of the first bypass, it is advantageous to provide a line that leads from the pressure (i.e., discharge) side of the vacuum pump to the supply line of the squeegee chamber.

At specification page 3, replace the paragraph beginning with "[a]dvantageously, the bypass line" with the following replacement paragraph:

Advantageously, the bypass line branching out from the feed line and/or the line leading from the pressure side of the eduction (i.e., return) pump to the supply side of the squeegee chamber are each respectively equipped with a cutout valve and/or with a throughflow regulating valve. The throughflow regulating valves are empirically adjusted in such a manner that, for example, a portion of the ink supplied by the priming pump is immediately recirculated into the ink tank or that the ink drawn off by the vacuum (i.e., return) pump is made available anew to the supply side of the squeegee chamber. In this manner, it is generally ensured during printing operations that the eduction volumes and the feed volumes, and the volumes supplied to and drawn off from the ink chamber are about equal, while taking under consideration the circumstance that, in the ink chamber, the ink becomes enriched with air.

At specification page 4, replace the paragraph beginning with "[a]ccording to an especially" with the following replacement paragraph:

According to an especially preferred embodiment of the invention, it is provided that the two pumping devices comprise two

chambers ~~from~~ of a double diaphragm pump with only one drive shaft. Such double diaphragm pumps with separate chambers, of which the one can ~~assume~~ provide delivery and the other can ~~assume~~ provide recirculation, are sold, for example, by ~~the~~ ALMATEC Maschinenbau ~~{machine-building}~~ GmbH ~~company~~, in D-47475 Kamp-Lintfort. Advantageously, the two chambers of the double diaphragm pump have the same volumetric pumping capacity.

At specification page 4, before the paragraph beginning with "[t]he individual figures show:," insert the following heading:

BRIEF DESCRIPTION OF THE DRAWINGS

At specification page 5, after the paragraph beginning with "[f]igure 2" (i.e., the brief description of Figure 2), insert the following heading and paragraph:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Further scope of applicability of the present invention will become apparent from the detailed description given hereinafter. However, it should be understood that the detailed description and specific examples, while indicating preferred embodiments of the invention, are given by way of illustration only, since various changes and modifications within the spirit and scope of the invention will become apparent to those skilled in the art from this detailed description.

At specification page 5, replace the paragraph beginning with "[i]n figure 1," with the following replacement paragraph:

In figure 1, the device shown in accordance with the invention is designed for the case in which the pumping capacity of the pump chamber 3 is equal to or greater than the pumping capacity of the pump chamber 4. Into the central section of the ink chamber, which is a component part of the squeegee device 1, a feed line 2 flows ~~in~~ that is connected to the delivery (i.e., discharge) side of a pump chamber 3 of the double diaphragm pump 3, 4. The suction side of the pump chamber 3 of the double diaphragm pump 3, 4 can, via the line shutoff valves or the cutout valves 5, 6, either be connected to the suction line 7, which flows ~~into~~ from the ink tank 8, or connected to the suction line 9, which flows ~~into~~ from the tank 10 for clean cleaning agent.

At specification page 5, replace the paragraph beginning with "[c]onnected to the feed line 2," with the following replacement paragraph:

Connected to the feed line 2, via the line shutoff valve or the cutout valve 11, is a line 12, in which an adjustable throttle valve or throughflow regulating valve 13 is arranged. A throttle valve ~~25~~ 26 can also be provided in the feed line 2.

At specification page 6, replace the paragraph beginning with "[w]hen cleaning the ink chamber" with the following replacement paragraph:

When cleaning the ink chamber and the lines channeling the printing ink, the valve 6 is closed, and while valve 5 is open, via the line 9, clean cleaning agent is suctioned from tank 10 and is channeled into the ink chamber via the feed line 2, with valve 11 closed. During this cleaning process, initially, the ink that can still be displaced by the cleaning agent via valve ~~18~~ 17 and via line 19, with valve 18 closed, is channeled into the ink tank 8. However, as soon as the ink is diluted by the solvent, valve 17 is closed and valve 18 is opened, and the cleaning agent or solvent rendered impure with the ink is channeled into the waste tank 20 via line 21. Since the cleaning agent also becomes enriched with air in the ink chamber during the cleaning process, a line 24 can be connected to the feed line 2 via valve 23, in which the adjustable throttle and throughflow regulating valve 25 is arranged and which flows into the waste tank 20. As soon as this occurs, cleaning agent can be channeled into the waste tank via this line 24 in order to take the circumstance into account that the cleaning agent that is recirculated through lines 14, 15 is enriched with air. To the extent that clean cleaning agent could be branched out from the feed line 2, line 24 could also be made to flow into the tank 10 for clean cleaning agent.

At specification page 7, after the last line, insert the following paragraph:

The invention being thus described, it will be apparent that the same may be varied in many ways. Such variations are not to be regarded as a departure from the spirit and scope of the invention, and all such modifications as would be recognized by one skilled in the art are intended to be included within the scope of the following claims.

At specification page 8 (i.e., the first claims page), replace the heading with the following replacement heading:

~~Patent Claims~~ WHAT IS CLAIMED IS: